

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; font-size: 24px; line-height: 1;"> OLYMPIA JAN 31 2002 PATENT & TRADEMARK OFFICE </div> </div>				APPLICANT Selfridge, et al		RECEIVED	
				FILING DATE March 23, 2001		GROUP. JUL 0 1 2002	
U.S. PATENT DOCUMENTS							
EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
R		AA 1,616,639	2/8/27	Sprague			
		AB 1,764,008	6/17/30	Crozier			
		AC 1,799,053	3/31/31	Mache			
		AD 1,809,754	6/9/31	Steedle			
		AE 1,951,669	3/20/34	Ramsey			
		AF 1,983,377	12/4/34	Kellogg			
		AG 2,461,344	2/8/49	Olson			
		AH 2,855,467	10/7/58	Curry			
		AI 2,872,532	2/3/59	Buchmann et al			
		AJ 2,935,575	5/3/60	Bobb			
		AK 2,975,243	3/14/61	Katella			
↓		AL 2,975,307	3/14/61	Schroeder et al			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
R	AM	H2-265400	10/30/90	Japan			X
R	AN	WO 01/08449	2/1/01	EP			
R	AO	WO 01/52437	7/19/01	PCT			
	AP						
	AQ						
OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)							
R	AR		ULTRASONIC RANGING SYSTEM by Polaroid Corporation				
↓	AS		EXCERPTS FROM ON COMBINATION TONES by Helmholtz, Editor's Comments on Paper 16, pages 228-238				
↓	AT		PARAMETRIC LOUDSPEAKER - CHARACTERISTICS OF ACOUSTIC FIELD AND SUITABLE MODULATION OF CARRIER ULTRASOUND, Aoki, Kenichi, Kamakura, Tomoo and Kumamoto, Yoshiro, Electronics and Communications in Japan, Part 3, Vol. 74, No. 9, pp. 76-82 (1991)				
EXAMINER				DATE CONSIDERED			
				3/10/06			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
LIST OF PRIOR ART CITED BY APPLICANT				APPLICANT Selfridge et al		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> RECEIVED JUL 01 2002 </div>	
				FILING DATE March 23, 2001		GROUP Technology Center 2600	

U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
<i>RR</i> <div style="border-left: 1px solid black; height: 100px; margin-left: 5px;"></div>	AA	3,008,013	11/7/61	Williamson et al			
	AB	3,012,222	12/5/61	Hagemann			
	AC	3,136,867	6/9/64	Brettell			
	AD	3,345,469	10/3/67	Rod			
	AE	3,373,251	3/12/68	Seeler			
	AF	3,389,226	6/18/68	Peabody			
	AG	3,398,810	8/27/68	Clark III			
	AH	3,461,421	8/12/69	Stover			
	AI	3,544,733	12/1/70	Reylek			
	AJ	3,612,211	10/12/71	Clark III			
	AK	3,613,069	10/12/71	Cary, Jr.			
	AL	3,654,403	4/4/72	Bobb, deceased			

FOREIGN PATENT DOCUMENTS							
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO		
AM							
AN							
AO							
AP							
AQ							

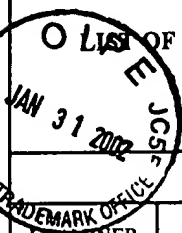
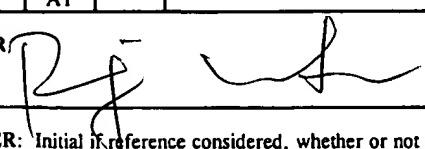
OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)			
<i>RR</i>	AR	PARAMETRIC ACOUSTIC NONDIRECTIONAL RADIATOR, Makarov, et al, Acustica, Vol. 77, pp. 240-242 (1992)	
<i>I</i>	AS	THE AUDIO SPOTLIGHT: AN APPLICATION OF NONLINEAR INTERACTION OF SOUND WAVES TO A NEW TYPE OF LOUDSPEAKER DESIGN, Yoneyama, et al, J. Acoustical Society of America 73(5), May 1983, pages 1532-1536	
<i>↓</i>	AT	THE AIR-DAMPED VIBRATING SYSTEM: THEORETICAL CALIBRATION OF THE CONDENSER TRANSMITTER, Crandall, I.B., American Physical Society, Dec. 28, 1917, pages 449-460	

EXAMINER <i>[Signature]</i>	DATE CONSIDERED <i>3/10/06</i>
--------------------------------	-----------------------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 24px; font-weight: bold;"> RECEIVED JUL 01 2002 Technology Center 2600 </div> </div>				APPLICANT Selfridge et al		FILING DATE March 23, 2001	
				GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 24px; font-weight: bold;"> RECEIVED JUL 01 2002 Technology Center 2600 </div> </div>	AA	3,674,946	7/4/72	Winey			
	AB	3,710,332	1/9/73	Tischner et al			
	AC	3,723,957	3/27/73	Damon			
	AD	3,742,433	6/26/73	Kay et al			
	AE	3,787,642	1/22/74	Young Jr.			
	AF	3,821,490	6/28/74	Bobb			
	AG	3,829,623	8/13/74	Willis et al			
	AH	3,833,771	9/3/74	Collinson			
	AI	3,836,951	9/17/74	Geren et al			
	AJ	3,892,927	7/1/75	Lindenberg			
	AK	3,919,499	11/11/75	Winey			
AL	3,941,946	3/2/76	Kawakami et al				
FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AM						
	AN						
	AO						
	AP						
	AQ						
OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)							
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 24px; font-weight: bold;"> RECEIVED JUL 01 2002 Technology Center 2600 </div> </div>	AR	PARAMETRIC ACOUSTIC ARRAY, Peter J. W., The Journal of the Acoustical Society of America, Volume 35, Number 1, April 1963, pages 535-537					
	AS	POSSIBLE EXPLOITATION OF NON-LINEAR ACOUSTICS IN UNDERWATER TRANSMITTING APPLICATIONS, Berkday, H.O., Department of Electronic and Electrical Engineering University of Birmingham, Edgbaston, Birmingham 15, England (Received April 13, 1965)					
	AT	ELECTROSTATIC LOUDSPEAKER DESIGN AND CONSTRUCTION, Chapters 4 and 5, pages 59-91, Wagner, Ronald, Audio Amateur Press Publishers, 1993					
EXAMINER				DATE CONSIDERED			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; font-size: 10px;"> OFFICE OF PRIOR ART CITED BY APPLICANT JAN 31 2002 PATE&T TRADEMARK OFFICE </div> </div>				APPLICANT Selfridge et al		<div style="font-size: 24px; font-weight: bold;">RECEIVED</div> <div style="font-size: 18px; font-weight: bold;">JUL 01 2002</div> <div style="font-size: 14px; font-weight: bold;">Technology Center 2600</div>	
				FILING DATE March 23, 2001		GROUP	
U.S. PATENT DOCUMENTS							
INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
PK	AA	3,997,739	12/14/76	Kishikawa et al			
	AB	4,056,742	11/1/77	Tibbetts			
	AC	4,064,375	12/20/77	Russell et al			
	AD	4,160,882	7/10/79	Driver			
	AE	4,207,571	6/10/80	Passey			
	AF	4,210,786	7/1/80	Winey			
	AG	4,242,541	12/30/80	Ando			
	AH	4,245,136	1/13/81	Krauel, Jr.			
	AI	4,284,921	8/18/81	Lemonon et al			
	AJ	4,289,936	9/15/81	Civitello			
	AK	4,295,214	10/13/81	Thompson			
	AL	4,322,877	4/6/82	Taylor			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AM						
	AN						
	AO						
	AP						
	AQ						
OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER 				DATE CONSIDERED 3/10/06			
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
LIST OF PRIOR ART CITED BY APPLICANT				APPLICANT Selfridge et al			
				FILING DATE March 23, 2001		GROUP RECEIVED JUL 01 2002	
U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	AA	4,378,596	3/29/83	Clark			
	AB	4,385,210	5/24/83	Marquiss			
	AC	4,418,404	11/29/83	Gordon et al			
	AD	4,419,545	12/6/83	Kuindersma			
	AE	4,429,193	1/31/84	Busch-Vishniac et al			
	AF	4,434,327	2/28/84	Busch-Vishniac et al			
	AG	4,439,642	3/27/84	Reynard			
	AH	4,471,172	9/11/84	Winey			
	AI	4,480,155	10/30/84	Winey			
	AJ	4,550,228	10/29/85	Walker et al			
	AK	4,558,184	12/10/85	Busch-Vishniac et al			
	AL	4,593,160	6/3/86	Nakamura			
FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	<u>TRANSLATION</u> YES NO	
	AM						
	AN						
	AO						
	AP						
	AQ						
OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER 				DATE CONSIDERED 3/10/06			
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 24px; font-weight: bold;"> RECEIVED JUL 01 2002 Technology Center 2600 </div> </div>				APPLICANT Selfridge et al		<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 24px; font-weight: bold;"> RECEIVED JUL 01 2002 Technology Center 2600 </div> </div>	
				FILING DATE March 23, 2001			
U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
21	AA	4,593,567	6/10/86	Isselstein et al			
	AB	4,672,591	6/9/87	Breimesser et al			
	AC	4,695,986	9/22/87	Hossack			
	AD	4,751,419	6/14/88	Takahata			
	AE	4,803,733	2/7/89	Carver et al			
	AF	4,823,908	4/25/89	Tanaka et al			
	AG	4,837,838	6/6/89	Thigpen et al			
	AH	4,885,781	12/5/89	Seidel			
	AI	4,887,246	12/12/89	Hossack et al			
	AJ	4,888,086	12/19/89	Hossack et al			
	AK	4,903,703	2/27/90	Igarashi et al			
	AL	4,908,805	3/13/90	Sprenkels et al			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AM						
	AN						
	AO						
	AP						
	AQ						
OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER 				DATE CONSIDERED 3/10/06			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; font-size: 20px; line-height: 1;"> O I P T E JAN 31 2002 PATENT & TRADEMARK OFFICE </div> </div>				APPLICANT Selfridge et al		RECEIVED	
				FILING DATE March 23, 2001		GROUP JUL 01 2002 Technology Center 2600	
U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
RA	AA	4,939,784	7/3/90	Brune			
	AB	4,991,148	2/5/91	Gilchrist			
	AC	5,054,081	10/1/91	West			
	AD	5,115,672	5/26/92	McShane et al			
	AE	5,142,511	8/25/92	Kanai et al			
	AF	5,153,859	10/6/92	Chatigny et al			
	AG	5,287,331	2/15/94	Shindel et al			
	AH	5,317,543	5/31/94	Grosch			
	AI	5,357,578	10/18/94	Taniishi			
	AJ	5,392,358	2/21/95	Driver			
	AK	5,430,805	7/4/95	Stevenson et al			
	AL	5,487,114	1/23/96	Dinh			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AM						
	AN						
	AO						
	AP						
	AQ						
OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER 				DATE CONSIDERED 3/10/06			
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							

PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. T7029.CIP.PCT.US		SERIAL NO. 09/787,972	
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 24px; font-weight: bold;"> LIST OF PRIOR ART CITED BY APPLICANT </div> <div style="position: absolute; bottom: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 18px; font-weight: bold;"> JAN 31 2002 </div> </div>				APPLICANT Selfridge et al			
				FILING DATE March 23, 2001		GROUP 2644	

U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
<div style="font-size: 2em;">R</div> <div style="font-size: 2em;">L</div> <div style="font-size: 2em;">A</div> <div style="font-size: 2em;">B</div> <div style="font-size: 2em;">C</div> <div style="font-size: 2em;">D</div> <div style="font-size: 2em;">E</div> <div style="font-size: 2em;">F</div> <div style="font-size: 2em;">G</div> <div style="font-size: 2em;">H</div> <div style="font-size: 2em;">I</div> <div style="font-size: 2em;">J</div> <div style="font-size: 2em;">K</div> <div style="font-size: 2em;">L</div>	AA	5,638,456	6/10/97	Conley et al			
	AB	5,700,359	12/23/97	Bauer			
	AC	5,859,915	1/12/99	Norris			
	AD	5,885,129	3/23/99	Norris			
	AE	5,889,870	3/30/99	Norris			
	AF	6,011,855	1/4/00	Selfridge et al			
	AG	6,108,427	8/22/00	Norris et al			
	AH	6,151,398	11/21/00	Norris			
	AI	6,188,772	2/13/01	Norris et al			
	AJ	6,229,899	5/8/01	Norris et al			
	AK	6,304,662	10/16/01	Norris et al			
	AL						

FOREIGN PATENT DOCUMENTS							
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		
					YES	NO	
AM							
AN							
AO							
AP							
AQ							

OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)			
AR			
AS			
AT			

EXAMINER 	DATE CONSIDERED 3/10/06
--------------	----------------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.